

REMARKS

The enclosed is responsive to the Examiner's Office Action mailed on April 17, 2009 and is being filed pursuant to a Request for Continued Examination (RCE) as provided under 37 CFR 1.114. At the time the Examiner mailed the Office Action claims 1-39 were pending. By way of the present response the Applicant has: 1) canceled claims 1-39; and, 2) added new claims 40 – 54. As such new claims 40-54 are now pending. The Applicant respectfully requests reconsideration of the present application and the allowance of claims 40-54.

The Applicant has canceled claims 1-39 and entered new claims 40-54 thereby rendering moot the Examiner's outstanding rejections. The Applicant offers the following comments concerning U.S. Pat. No. 6,662,359 (hereinafter, "Berry") which was used by the Examiner in the outstanding action as a basis for concluding that the Applicant's independent claims were anticipated. In particular, the Applicant notes that the Examiner cited col. 5, line 59 to col. 6, lines 45 and col. 7, lines 5-11 of Berry as disclosing "selective instrumentation of some or all methods". See, Examiner's Office Action mailed 4/17/09, p. 3. As the Applicant understands Berry, Berry discloses a web browser whose byte code is modified so as to be able to modify all classfiles that are retrieved from a network via the web browser. Berry states (emphasis added):

Java class files are often downloaded from a network, such as the Internet. The method of the present invention may be practiced on any Java class file, regardless of how the class file is obtained. If the class file is obtained from a network, such as the Internet, it is typically loaded immediately into the Jvm and executed. Such Java class files are not usually saved on the user's hard disk or in a file system. In some cases (e.g., embedded systems), there may not be a hard disk or local file system available. Class files downloaded from a network are typically

loaded directly into memory by the Jvm ClassLoader. Therefore, it is necessary to intercept the class file at the loader and transform its memory image directly. This is accomplished by modifying a web browser so that it dynamically modifies class files coming from the network, as described below with reference to FIG. 3. In the described embodiment, the web browser is also a Java file, and thus the same method used to modify the web browser is used to modify downloaded Java class file. Also note that the method of the present invention works even with Java files containing a security signature, as the method of the present invention is used after the security signature verification.

The method of the present invention may be used to modify the web browser. For example, a Java enabled web browser includes Java Runtime class files, which are used to run Java applets coming across the network. The Java Runtime is modified, using the method of the present invention so that it provides functionality to modify all class files that the Runtime loads across the network for subsequent execution. In other words, the method of the present invention is invoked twice-- first, to modify the web browser, and second to cause the web browser to modify a downloaded class file.

Berry, Col. 4, line 59 to Col. 5, line 23.

The above citation discloses that all classfiles downloaded from a network are modified. Col. 7, lines 5-11 of Berry appear to disclose that only some of the methods within a classfile may be modified ("Selective instrumentation is possible if only some of the methods are to be instrumented. In the described embodiment, an inclusion/exclusion list is used to specify which methods are to be instrumented"). Thus Berry appears to disclose – at most – that all classfiles downloaded from a network are modified but less than all of the methods within the downloaded classfile need be modified. By contrast, the Applicant's new claims recite (emphasis added):

providing a user with options for modifying an application's bytecode, said application composed of a plurality of archive files, said archive files having respective class files, said respective class files having respective methods, said options including one or more of the following:

- i) modifying bytecode of classfiles within only one of said archive files;
- ii) modifying bytecode of only one classfile within any one of said archive files;
- iii) modifying bytecode of only one method within any one of said archive files' respective classfiles;

modifying bytecode of said application in accordance with said user's selection of one of said options;

executing said application in an object oriented runtime frame work, said executing including processing a portion of said application's bytecode that was modified in accordance with said user's selection of one or more of said options; and,

presenting to said user an output generated from execution of said portion of said application's bytecode that was modified.

Notably, Berry does not appear to be directed to the modification of applications generally nor the modification of applications composed of archive files, specifically. Thus, Berry is not capable of disclosing any of the emphasized claim limitations above. Berry clearly does not disclose modifying bytecode of classfiles within only one archive file of a plurality of archive files, nor does Berry disclose modifying bytecode of only one classfile within any one of such archive files. Moreover, even though Berry discloses that some of the methods within a classfile may be modified, Berry does not disclose that only one method within any one of the classfiles of an application's respective archive files' may be modified. Thus, the Applicant respectfully submits that the newly presented independent claims are allowable over the Berry reference.

CONCLUSION

In light of the comments above, the Applicant respectfully requests the allowance of all claims.

If there are any additional charges, please charge Deposit Account No. 02-2666. If a telephone interview would in any way expedite the prosecution of this application, the Examiner is invited to contact Robert B. O'Rourke at (408) 720-8300.

Respectfully submitted,

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